PROVISION IN THE ELEMENTARY SCHOOL FOR SUPERIOR CHILDREN

FRANK N. FREEMAN
School of Education, University of Chicago

EARLIER PROVISION FOR GIFTED CHILDREN

For many years the graded school has been forced to recognize the fact that an important fraction of the children in the elementary school are not able to do the work which is designed for the average child. As a consequence, provision has been made to give these duller pupils work of the kind or degree of difficulty which is suited to their capacity. In practically all of the larger systems special rooms are provided for such pupils. It was not as early forced upon the attention of teachers and supervisors that there is another group of pupils who are capable of doing more or better work than the average. Observant teachers did, to be sure, notice this fact, but it was first forced upon our attention, in a form which could not fail to be recognized by everybody, as the result of careful tests which were applied to all children alike. Such tests have shown that children vary in their abilities in the same way and by the same degree above the average as below. If it is necessary to make special provision for the children at the lower end of the scale, then, the theory of the distribution of abilities would imply that there is equal need for provision for the children at the upper end of the scale.

A somewhat conservative method of providing for children of different degrees of ability has been in use for a good many years. In 1868, as reported by Theodore S. Henry,[1] the plan of flexible promotion was discussed. According to this plan or similar plans, the entire elementary-school course is divided into small units and promotion is frequent. When a child makes a double promotion

[1] Theodore S. Henry, "Classroom Problems in the Education of Gifted Children," *Nineteenth Year Book of the National Society for the Study of Education, Part II.*

in this system, he does not lose as much subject-matter as he would if he skipped an entire year. On the other hand, if a pupil repeats a section of the work, he is not delayed an entire year in his progress.

Another device which has been in use for some time consists in dividing pupils of a grade into sections and classifying them so that the pupils of the same grade of ability are grouped together.

In recent years, however, many have come to believe that the differences at the upper end of the scale are great enough to require as radical a type of reorganization as has been provided for backward pupils. There have been recently organized, therefore, special classes in which the brightest pupils are put together to receive a more specialized treatment than is given when the grade is merely divided into sections.

With a view to determining roughly how prevalent the practice of organizing such special classes has become, the manner in which such classes are organized, the difficulties which are met with and the methods of overcoming them, and, finally, to obtain an estimate of the result of such organization, a questionnaire was sent during the fall of 1919 to all cities in the United States of 25,000 population or over. The results of the questionnaire are briefly summarized in this article.

After the present inquiry was well under way Henry's report already referred to appeared. In chapter I of this report a description is given of the chief flexible promotion schemes which are in operation; chapter ii gives an account of the special classes which the author had been able to discover up to 1917. He reports fourteen cities in which there are special classes for gifted children and three additional cities where there are mixed rooms which include both dull and bright children.

The large majority of cases which Henry reports consist of preparatory classes after the form of the early classes organized in New York, Worcester, and Baltimore. The purpose of these classes is to give special instruction to the brighter children of the upper grades in order that they may more quickly prepare for high school. The acceleration sometimes consists in doing the work of the upper grades in less time than usual, and sometimes in taking on certain high-school subjects while the pupils are doing

the work of the upper elementary grades. In only three cities were the bright pupils given special work in the intermediate or lower grades.

RESULTS OF THE PRESENT STUDY

The responses to the present questionnaire indicate that the practice of organizing special classes for bright children is growing rapidly. There is some difficulty in interpreting the replies, due to the fact that the term "special classes" is sometimes interpreted to apply to the divisions of the regular grades. It is quite likely that some of the replies which reported the organization of special classes referred merely to this practice. Even allowing for this, however, it is quite certain that there are at present many more than the fourteen cities reported by Henry which make such special provision. If the smaller cities had been included, doubtless many more cases would have been reported.

Interpreting the figures with due caution, it is still significant that out of one hundred and forty who replied fifty-two reported the existence of special classes for bright children; three reported that special classes had been temporarily discontinued, and eight reported that they were being organized. Beside this, twenty-five reported some other plan, such as frequent promotion and the sectioning of a grade according to ability, for caring for the bright children. Only fifty-three reported that no plan was in operation. Approximately half of the questionnaires were answered. While it is probable that most of those who did not reply had no provision to report, it is likely that complete returns would add materially to the number of cases in which special provision is made. In any case, the movement is a very rapidly growing one, and it is desirable that the experience of those who have tried the new form of organization should be made available to others who may be contemplating such a project.

The questions which were sent out are as follows:

1. Are special schools or classes organized in your system to give special opportunity to bright children?

2. *Organization.*—Is the progress of special classes articulated with that of the regular classes or are they independent? How are the special classes or schools articulated with the high school?

3. *Curriculum.*—Is the course of study different in kind? That is, does the special class pursue different work or more work? Does the special class do the same work but in less time? Does the course of study correspond at definite stages to definite stages in the regular classes?

4. *Selection of children.*—Are the children for opportunity classes or schools selected by tests, teacher's judgment, or school marks?

5. *Social adjustment.*—Do difficulties arise in social adjustment of children who advance rapidly? If so, how are they met?

6. *Results.*—How long has the new organization been tried? What is its effect on regular classes?

7. What further developments are planned?

PERIOD AT WHICH SPECIAL PROVISION IS BEGUN

One important question which was not asked concerns the time in the child's school life in which the special class is organized. It has been already remarked that in the early history of the movement the classes were organized chiefly in the grammar grades to give special opportunity for the pupils who were going to high school to save time in the latter part of their elementary course. A good many of the recently organized classes are undoubtedly designed to serve this same class of pupils. In fact, a number of the replies indicate that the organization of the junior high school is believed to serve the same purpose as these special preparatory classes. In the junior high school it is possible, because of the departmental work, to classify pupils in each grade according to their ability and to allow a variation in the amount of work to be taken by the various pupils. Furthermore, the curriculum is ordinarily modified so as to introduce the traditional high-school subjects into the seventh or eighth grade. It seems likely, therefore, that the need which was met by these preparatory classes will in a large measure disappear.

The drift of the replies, however, indicates that it is coming to be widely recognized that provision for bright children needs to be made earlier than the junior high school period. In a number of the special classes which were reported, the classification is made in the fourth and fifth grades, while in a few instances it originates as low as the first grade. Tests of the type of the Binet scale, and group tests of the point-scale type, such, for example, as the army tests, are being rapidly developed and applied to the children all the

way down the grades. The results are indicating that wide differences in ability appear from the first, and call for differentiated treatment. An example of the classification of the pupils from the first grade up may be found in the schools of Nashua, New Hampshire. The pupils are sorted out in the first three grades by the formation of three divisions of each grade. By the fourth grade the group of brightest pupils has been selected by this process, and they are now organized into a rapidly moving group which forms a permanent organization for the rest of the elementary-school course. In Hinsdale, Illinois, the application of the Binet scale was used to classify first-grade children and it was found that children who received the higher scores were able to do much better work than the others. In Council Bluffs, Iowa, the Binet scale again was used to determine the rate of promotion at the first grade, and the results justified the rapid promotion of the younger and brighter pupils.[1]

The following is the list of the cities from which various types of provision for bright children other than special classes were reported:

1. Promotion by subjects:
   Kenosha, Wis.
2. Frequent promotion (half-yearly, quarterly, etc.):

Binghamton, N.Y.	Jersey City, N.J.
Butler, Pa.	Lynchburg, Va.
Chicago, Ill.	New Orleans, La.
Denver, Colo. (special promotion classes)	New Rochelle, N.Y.
	Newton, Mass.
Dubuque, Iowa	St. Louis, Mo.
Elgin, Ill.	Waco, Texas
Harrisburg, Pa.	Washington, D.C.

A variation in this procedure is represented in the special-promotion classes of Denver which are organized for nine weeks at the beginning of the year to prepare pupils for double promotion. Another variation is the practice at Rockford, reported by Henry,

[1] Theodore Saam, "Intelligence Testing as an Aid to Supervision," *Elementary School Journal*, XX (September, 1919), 26–32.

of providing a special teacher to give the brighter pupils of a grade the work of the next grade above at the same time they are doing the work of their own grade.

3. Sectioning each grade according to ability:

Binghamton, N.Y.
Erie, Pa.
Hazelton, Pa.
Jamestown, N.Y.
Knoxville, Tenn.
Middletown, Conn.
Mobile, Ala.

There is, no doubt, great variation in the method of making this classification. It may be done carefully, thoroughly, and uniformly throughout a school system. On the other hand, it may be done only in the larger buildings where it is necessary to have two or more sections of a grade because of the large number of pupils. The pupils may be selected for the different sections in a careful or systematic way, or only upon the basis of a rough estimate of ability. There may be different numbers of groups ranging from two up to at least five. The larger the number of groups, of course, the more homogeneous may be the ability of the pupils within each group. When it is reported that the pupils of a grade are selected according to ability, therefore, it is often difficult to determine how satisfactory the provision for bright children is.

4. Extra work for bright children:
Muncie, Ind.
Lynn, Mass.

5. Special teacher to assist bright pupils:
Elmira, N.Y.
Oshkosh, Wis..

6. Special classes for all unusual pupils including bright and dull pupils:
Oklahoma City.

SPECIAL CLASSES FOR BRIGHT PUPILS

We now come to the analysis of the replies to the questionnaire concerning special classes. The replies are not to be considered as furnishing accurate and detailed statistics regarding the nature or frequency of the various practices mentioned. In many instances the questions were not answered. There is no means of

knowing whether such cases are to be interpreted as positive or negative. The numbers will, therefore, be used only to indicate the trend of practice or of opinion. As such they will be of significance.

It is evident from the answers to the first question that the chief form of organization consists of classes rather than schools. There were reported, however, seven summer schools, which were organized in part or in whole to give the opportunity for bright children to advance beyond the usual rate. The organization of special classes was definitely reported in forty-one cities.[1] While some of these undoubtedly simply represent the division of grades into groups, it is highly probable that there are at present in existence many more special classes than the fourteen reported by Henry.

ARTICULATION WITH REGULAR CLASSES

In answer to the second question it was reported that the progress of the special classes was articulated with that of the regular grade in eighteen cases, that it was independent in eleven cases, and that it was partly articulated and partly independent in three cases. In at least eleven cases, then, the special class is obviously a coherent organization which takes its own pace regardless of the progress of the regular grade. In such cases it is difficult to transfer pupils back and forth between the special class and the regular class. In the majority of cases an attempt is evidently made to retain the possibility of such a transfer. This provision for transfer necessitates an elaborate type of organization and future experience will have to determine which is the better practice.

[1] The following places have either special classes or special schools or both: Little Rock, Ark.; Berkeley, Cal.; Los Angeles, Cal.; San Diego, Cal.; Denver, Colo., Bridgeport, Conn.; Meriden, Conn.; New Haven, Conn.; Atlanta, Ga.; Hinsdale, Ill.; Moline, Ill.; Oak Park, Ill.; Fort Wayne, Ind.; Indianapolis, Ind.; Richmond; Ind.; Sioux City, Iowa; Kansas City, Kan.; Louisville, Ky.; Newport, Ky.; Baltimore, Md.; Everett, Mass.; Haverhill, Mass.; Salem, Mass.; Waltham, Mass.; Worcester, Mass.; Battle Creek, Mich.; Detroit, Mich.; Grand Rapids, Mich.; Muskegon, Mich.; Minneapolis, Minn.; Kansas City, Mo.; Springfield, Mo.; St. Louis, Mo.; Omaha, Neb.; Nashua, N.H.; Montclair, N.J.; East Orange, N.J.; Newark, N.J.; Plainfield, N.J.; Passaic, N.J.; Rochester, N.Y.; Syracuse, N.Y.; Cincinnati, Ohio; Columbus, Ohio; Chester, Pa.; Cranston, R.I.; Houston, Texas; San Antonio, Texas; Salt Lake City, Utah; Richmond, Va.; Everett,Wash.; Spokane, Wash.

The articulation with the high school offers considerable variety of possibilities. In two cases the special work was reported as being a part of the junior high school. The ease of this type of organization has already been commented upon. In five cases it was reported that the work was not articulated. Here apparently the organization is under the direction of the elementary school and the relationship with the high school has not been worked out. It is possible that these replies merely mean that no special attempt has been made to take on high-school work, not that there is any difficulty in pupils going on into the high school. In three cases it was reported that credit is given in the high school for work done in the elementary school, and in six cases that pupils in the elementary school anticipated part of the high-school work. These nine cases evidently represent the preparatory type reported in the earlier experiments. In three cases it was reported that pupils pass from the seventh grade to high school, thus saving one year; and in one case the pupils progress rapidly but enter high school with the regular class, having accomplished the elementary-school work in less than the regular time. There is nothing in the replies to indicate difficulty arising from the organization of special classes in reference to the pupils' high-school work. A considerable number, namely, twenty-five, of the replies, however, either left this question blank or answered in an indefinite manner. This is a problem which either is not given much consideration or offers no difficulty.

THE CURRICULUM: SPEEDING UP OR ENRICHMENT

The first two questions with regard to the curriculum were evidently put somewhat ambiguously and were, therefore, not always clearly answered. The intention was to determine whether the work in the special classes is made different from that of the ordinary classes by adding new material to it, or whether the special classes simply do ordinary work more rapidly than usual. The first question, "Is the course of study different in kind?" was intended to refer to the reorganization in the content of the subject-matter. The replies were as follows: different work, 2; both, 5; more work, 17; no, 9; essentials, 2; varies with need of special

class, 1; left blank, 9. It is probable that the two reporting "different work" and the five reporting "both" indicate an enrichment of the curriculum as contrasted with mere speeding up. However, it is possible that some reporting "more work" meant also an enrichment. Additional light may be thrown upon the interpretation of these replies by the answers to the next question which inquires whether the same work is done in less time. To this the replies were affirmative in a very large majority; thirty-two answered "yes"; one, "no"; and eleven left the question blank. In some cases the speeding-up process is so emphasized that many of the details of the courses are omitted.

This raises one of the central questions in the whole problem. There appears to be some doubt in the minds of those who have written upon the theory of such classes, but the practice seems to have been prevailingly of one type, namely, speeding up the pupils' progress. This speeding-up process has taken two forms. In the first place, it consists in going through the regular curriculum in the same order as is usual but in less time. The second method consists in introducing advanced work earlier in the curriculum and in this way accomplishing the entire course more quickly.

It is undoubtedly desirable that the students who are to do advanced professional work should not linger unnecessarily long upon the earlier stages of their preparation. There has been a vast amount of waste of time and energy through such pupils marking time and repeating work through reviews which were not necessary for them. Some acceleration in the progress is doubtless very desirable.

On the other hand, we should not conclude too readily that mere speeding up or condensation will meet the needs of these pupils in the best manner. There can be little question that it is possible to carry this speeding-up process too far. Experiments with certain special classes have shown, for example, that they can do an ordinary year's work in a half-year. Reasoning from this, it has been predicted that such classes could go through the elementary school in four years. The question has often arisen in the minds of educators whether this is the natural outcome of these experiments and, if so, whether it is desirable.

It may be that an analysis of the type of ability of these bright children will throw more light upon this problem. In a number of cases it has been reported that their superiority is not equal in the various realms of school work. The suggestion has been made a number of times in the replies to this questionnaire that the bright children are not particularly superior in some of the more mechanical aspects of school work, such as writing, spelling, the fundamentals of arithmetic, and the mechanics of written composition. In the report of the special classes of Richmond, Virginia, for example, the following statement is made:

> The children grasp new principles quickly and apply them to the practical problems independently, but often sacrifice accuracy on the mechanical side to their interest in working out the solution. This has necessitated much drill in the fundamentals of numbers. The arithmetic work is held back by the need of drill in the mechanical process but the grade work has been nearly doubled. The writing of these pupils is poor compared with their other work. This is because of the difference between their mental and physical development. In spelling these children eternally misspell the insignificant word and spell the unusual word. They spell the word correctly in written work and miss it when dictated in columns. The greatest progress has been in the geography and history courses. The content of the written work is rich and free. The form, however, shows carelessness. Among the most careless of the children are two scoring 156 and 138 I.Q.

These reports indicate what has been shown by means of general tests, that there are detailed or specialized abilities which develop at fairly definite stages or ages. Certain abilities seem to depend to a considerable extent upon the degree of physical development of the child. It will necessitate much study and experimentation to determine what the limitation of these stages are. It seems likely, however, that what is meant by the term "enrichment of the program" represents the process that is better suited to the bright pupils than a mere acceleration of work. Perhaps the type of work which is desirable may be described as carrying on the sequence which is adapted to the regular classes on a higher level. This, of course, is a vague expression and would have to be interpreted in detail to be made entirely clear. Perhaps we may say that the work of such children could well be more rationalized than that of the less gifted ones. In arithmetic, for example, we

might very well expect the bright children to understand more thoroughly the number processes instead of learning them in a mechanical fashion. In all subjects, without sacrificing accuracy and the acquirement of form, we might emphasize much more largely the ability to conceive and work out problems. To some extent it might be desirable to introduce at an earlier age some of the types of work which ordinarily come at a later age, but in many other instances the adaptation should probably consist rather more in an enrichment of the work and its prosecution on higher levels. This is a matter which must be the subject of much practical experimental work in the near future.

An interesting adaptation of school activities to superior pupils is reported from the junior high school at Kansas City. The pupils of the best division here are given special opportunity to engage in extra-curricular activities, and they are organized into a special group which meets with the principal regularly in order that they may be encouraged to exercise leadership in the school. This experiment indicates that the work of bright pupils may be enriched in such a way as to promote not only better intellectual development but also a better development of their social capacities. What might under some circumstances be a detriment is turned into an advantage by this procedure. The results of the special work upon the pupils' social development is referred to later.

The answers to the last question under curriculum indicate that the above interpretation of the current practice is correct, that is, the work of special classes is practically the same as the work of the regular classes, given in more rapid sequence.

MANNER OF SELECTION FOR SPECIAL CLASSES

The fourth question concerns the manner in which the children are selected for the special classes. The answer to this question undoubtedly reveals to some degree the carefulness and thoroughness with which the special groups are selected. The extent to which the tests are used measures roughly the degree of accuracy of the selection. The prevailing method is to base selection in the first instance upon the teacher's judgment, thirty-five replying that this method was used. In thirty-two cases it was reported

that tests and school marks were used. Unfortunately the question was not put in such a way as to distinguish between the tests in the school subjects and general tests. The probability is that in the majority of cases the tests referred to were tests in school subjects.

In most cases more than one basis of selection was employed. This is undoubtedly the best procedure. There is always a certain amount of error resulting from the use of any single basis of selection. Mental tests are probably the most accurate single index of the pupils' ability to do a high grade of work. In some cases this is the chief basis of selection. In Omaha, for example, those pupils are admitted whose I.Q. is 112 or more. However, there are some qualities which are important for success in school which are not revealed by intelligence tests. Such qualities are summarized by the term "school attitude." It is desirable to supplement the results of general tests, therefore, by the teacher's judgment. Ability in the school subjects which is not directly brought out in the tests is revealed in school tests and in school marks. The best procedure for the selection of such children is probably, first, a preliminary classification on the basis of general mental tests; second, an examination of this classification in the light of the teacher's judgment and of tests in the school subjects; and third, a special scrutiny of cases in which there is a wide discrepancy and the tentative classification of such cases subject to shifting in the light of their subsequent work.

A number of forms of general tests are now available for this purpose. The Stanford Revision of the Binet Scale is, of course, a well-known but somewhat laborious method. G. M. Whipple, as a result of his experiment at Urbana, has organized a set of tests for this purpose which is published by the Public School Publishing Company, Bloomington, Illinois. A number of group tests, somewhat after the manner of the army tests, have also been organized for use at various levels.[1] Among these may be men-

[1] Frances Lowell, "A Group Intelligence Scale for Primary Grades," *Journal of Applied Psychology*, III (1919), 215–47; Caroline E. Myers, "The Myers Mental Measure," *The Sentinel*, Carlisle, Pa.; M. E. Haggerty, *Standard Educational Tests, Delta 1 for grades 1 and 2; Delta 2 for grades 3 to 9*, Yonkers-on-Hudson, New York: World Book Company, 1920; S. L. and L. W. Pressey, *Mental Survey Tests*, published at the University of Indiana; A. S. Otis, *The Otis Group Intelligence Scale*, World Book

tioned the following: for the primary grades, the Lowell Scale, the Myers Mental Measure, the Haggerty Scale, the Pressey Scale, and the tests being developed by the National Research Council. A sixth test for the primary grades is being developed by F. A. Kingsbury, of the University of Chicago. For the upper grades there are the Otis Scale and the Haggerty Scale. For the high-school level there are the Pressey Scale, the Chicago Group Intelligence Scale, and the Haggerty Scale. The more difficult forms of the *National Intelligence Tests* may apply both to the upper grades and the high school.

SOCIAL DIFFICULTIES IN ADVANCEMENT OF BRIGHT PUPILS

The fifth question was designed to get at the problem which has already been mentioned with reference to the relation between the child's social and intellectual development. The objection which is often raised to the rapid promotion or acceleration of the bright children is that this brings them into association with children of advanced age and different social development. The replies to the questionnaire, however, did not indicate that such difficulties are serious. Twenty-nine answered the question, whether difficulties in social adjustment arise, by a categorical "no," four replied "yes," and twelve left the question blank. Those who replied that there was difficulty, however, stated that the advantages outweighed the disadvantages.

It should, of course, be kept in mind that the prevailing retardation in the schools produces the difficulties which are anticipated to arise from the advancement of bright pupils. The segregation of the bright pupils in a class by themselves would reduce the variety of ages of the pupils of the same group. This is well brought out in the report from Muskegon, Michigan. By taking the slow, so-called undesirables, out of the seventh grades and separating them from the bright pupils, the average age of the brighter pupils became twelve years and ten months, and of the duller pupils fifteen years. By this means eight pupils who were

---

Company, 1919; H. O. Rugg and F. N. Freeman, *The Chicago Group Intelligence Scale*, Chicago, Illinois: University of Chicago Book Store; *National Intelligence Tests*. Yonkers-on-Hudson, New York: World Book Company.

regarded as undesirable associates of the younger children were removed from their group. The difficulty arises when a few isolated individuals are promoted far ahead of their age. It disappears, very largely at least, when the brighter pupils are organized into a group of their own. In fact, the difficulty not only disappeared in this case but a difficulty which is present in an ordinary organization was by this means actually removed.

REPORTS ON RESULTS

The answers to the first question on results indicate that the movement is one which is in the course of rapid development. The frequency of the periods of time during which the classes have been in existence is as follows:

Number of years organized...	20	18	12	10	8	6	5	4	3	2	1 or less
Number of cases.....	1	1	2	1	1	2	2	4	6	6	9

The number of cases increases rapidly in the recent years.

Contrary to the opinion which is often expressed, the effect of withdrawing the brighter pupils from the regular classes is helpful rather than harmful. Twenty-five reported that the effect was stimulating, four that there was no appreciable effect. None reported positive bad effects. One suggests the explanation of the benefit by saying that withdrawing the bright pupils removes their tendency to monopolize the time of the class. In Muskegon the scores of three divisions in arithmetic were kept throughout a semester. At the beginning, the poor division made the very low score of 32 per cent, and the better divisions made scores of 54.5 per cent and 70 per cent respectively. At the end of the semester the poor division had advanced to 77.9 per cent, bringing it to a rank midway between the two good divisions, which scored 72.4 per cent and 82 per cent respectively.

The answers to the last question indicate that for the most part the results of the experiment are satisfactory to those who have made it. Nine report that they plan to extend the work to include more schools or classes. Three report the intention of using more accurate means of selecting the pupils. Their plans include concentration of higher divisions into centers, organization of a summer school for superior students, the classification into finer

divisions, the introduction of a special teacher into each building, the classification of all junior high school students. The difficulties which arise in the adaptation of the curriculum to bright pupils are recognized by three, and these indicate their intention of developing the curriculum so that it will be better suited to the various sections. In four cases the introduction of the junior high school is mentioned as making the situation satisfactory, and the special classes are to be abandoned. Eight replies state that whereas this work is not at present being done there are plans under way for its organization.

The results of the questionnaire indicate that many experiments are being made with special classes and that the number of experiments is rapidly increasing. The organization of the work, particularly the adaptation of the curriculum to the bright pupils, is in a stage of great uncertainty. The results in general are highly satisfactory, but the best means of securing these results are not yet objectively determined. It would be very useful to the profession to have definite experiments, controlled by tests, carried on in the organization of special classes in order to determine the best procedure and the benefits and difficulties attending them.